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ABSTRACT

The influences of mentors on the career development of college faculty and academic administrators employed by the state university system of Florida was studied in 1980. Usable responses to a 55-item, self-report mail questionnaire were received from 287 faculty members and academic administrators. It was found that academics with mentors showed significantly higher levels of career development than those without mentors in terms of publication record, grant record, leadership record, academic rank, yearly gross income from professional activities, job satisfaction, and career development satisfaction. There were preliminary indications that while academics with mentors (as a group) show significantly higher levels of career development than those without mentors, exposure to certain mentoring conditions, such as early experience with mentors, long mentorships, and multiple mentorships might be associated with even higher career development levels. Theoretical bases of mentorship and dimensions of mentorship are considered to indicate optimum conditions under which mentors can facilitate the careers of academic professionals. It is recommended that providing individuals with opportunities to find mentors would become an important responsibility of the university. A bibliography is appended. (Author/SW)

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THE ROLE OF THE MENTOR IN THE CAREER DEVELOPMENT OF UNIVERSITY FACULTY MEMBERS AND ACADEMIC ADMINISTRATORS

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The Role of the Mentor in the Career Development of University Faculty Members and Academic Administrators[1]

Most people can probably think of at least one human being who has had some influence on their careers. Some individuals have experienced special--even magical or mystical--relationships with significant others who have had powerful impact on their career development and on their lives. It is only recently that researchers, particularly psychologists, psychiatrists, and business professionals, have begun to look systematically at relationships with a special type of significant other--the mentor[2]--and at the effects of these relationships on individual and career development.

At colleges and universities, under current conditions of limited resources coupled with ever-increasing pressures for accountability, the optimum development of faculty members and administrators has become more desirable than ever. A factor as potentially capable of contributing to the career development of academics as mentorship is worthy of exploration.

Purpose

A thorough review of the literature on the academic profession revealed no systematic study of the role played by mentors in the determination of academic advancement or career development. This investigation addressed such an important yet neglected area of research in career development within the field of higher education.

The central purpose of the study was to determine whether mentors can significantly influence the level of career development of university faculty members and academic administrators. Another objective of the study was to explore certain aspects of mentorship among academics in an effort to begin to delineate, however tentatively, some of the dimensions of a theory of mentorship relevant to career development within the academic profession.

The Mentor Concept

Mentor was the Greek mythological tutor and close advisor of Telemachus, the son of Odysseus. Hence we have the word mentor.

According to Levinson (1976, p.23), a mentor is one who "takes a younger man under his wing, invites him into a new occupational world, shows him around, imparts his wisdom, cares, sponsors, criticizes, and bestows his blessings." A good mentor, Levinson suggested, is an admixture of good father and good friend (1978, p.333). Burton (1977) described the mentor as a person with a phenomenological presence, since his influence is never merely the sum of his biology and psychology. He suggested that the mentor is not only older, more experienced, more powerful, and more creatively productive than the protege (as others have indicated) but also more intuitive and charismatic. According to Burton, the mentor is either a master of the symbol --words and images--or of persuasion.

Mentors are, by definition, from outside the protege's family. The lack of familial ties indicates that the mentor's interest in the protege derives from qualities in the protege's personality. The mentor is thus able to confirm the protege in a way that a parent, because of vested interest, cannot (Kellerman, 1978). Although mentors may utilize the parental impulse, mentoring can be in some ways more complex than parenting, as it requires some degree of mid-life individuation. As one gains a stronger sense of self and of one's continuing development, one becomes more able to foster the development of another adult (Levinson et al., 1978, p.253).

Becoming a mentor is part of the developmental process that Erikson has called "generativity"--a growing awareness of the continuity of human life and of one's own responsibility for the upcoming generation of young adults (Erikson, 1969, pp.314-21). By virtue of having a protege, a mentor becomes, in a certain way, a creator (Burton, 1977, p.118). Good mentoring, then, is one

of the special contributions that persons in middle adulthood can make to society.

According to Shapiro, Haseltine, and Rowe (1978), mentors are at one end of a continuum of advisory or support relationships which facilitate access to positions of leadership, authority, or power. They suggested that mentors are the most intense and paternalistic personae in the continuum of "patrons" (protectors, benefactors, sponsors, advocates, supporters, advisors) ranging from mentors to peer pals. They also suggested that those patron relationships falling toward the "mentor" side of the continuum tend to be hierarchical, parental, intense, exclusionary, and elitist, as opposed to relationships falling toward the "peer pal" side of the continuum, which tend to be more egalitarian, less intense and exclusionary, and potentially more democratic.

Among famous mentor-protege pairs one may cite Franz Joseph Haydn and Ludwig van Beethoven, Joseph Breuer and Sigmund Freud, Sigmund Freud and Carl Jung, Franz Boas and Margaret Mead, Jean-Paul Sartre and Simone de Beauvoir, Hubert Humphrey and Walter Mondale, and Federico Fellini and Lina Wertmuller.

According to Levinson, mentor-protege relationships are not common. He believed that many adults give and receive little mentoring (1978, p.334). Even those who have mentors rarely have more than three or four in their lifetimes and most have only one (1976, p.24).

Theoretical Bases

It has been established that mentorship enhances adult development (Burton, 1977; Levinson, 1976, 1978); one may argue that it also facilitates and enhances career development--a key aspect of individual development. Specifically, it is proposed that mentors facilitate and enhance the career development process by acting as professional and organizational socialization agents.

Mentors can serve various important functions in the processes of professional and organizational socialization. From a reference group theory perspective, for example, mentors may act as "reference individuals" (Merton, 1968, pp. 356-357). Kelley (1952) spoke of two important functions of reference groups (or individuals). The first--the "normative" function--is that of setting norms, expectations, standards, and values for others. The second function of reference groups (or individuals)--the "comparison" function--consists of serving as standards, comparison points, or frames of reference against which others can evaluate their own performance. Kemper (1968) discussed still another important function of reference groups (or individuals) relevant to mentorship. This is the "audience" function; in this capacity, mentors may provide feedback and motivational impetus for achievement. Thus, the most facilitative type of mentor for achievement purposes would be one who combines normative, comparison, and audience functions.

From a social learning point of view, two other functions of mentors in the processes of professional and organizational socialization may be noted. First, as "models" to be emulated, mentors can spare their proteges much trial-and-error experimentation. Second, Bandura (1969, pp.237-41) spoke of the benefits of vicarious reinforcement; as applied to mentorships, this process suggests that the mere perception of reinforcing outcomes experienced by mentors may have important activating or motivational effects on their proteges.

Two mechanisms, may be noted by which mentors can enhance and facilitate the professional and organizational socialization of their proteges. From a learning theory point of view (Skinner, 1969), mentors socialize their proteges as they selectively administer or withhold various "reinforcements" or "punishments." Identification with the mentor is another major mechanism by which the professional and organizational socialization of proteges takes

place (Bandura, 1969). Similarity plays an important role in the identificatory process (Festinger, 1954; Merton, 1968; Newcomb, 1962), and two possible explanations may be given of how similarity fosters identification. According to the cognitive theory of identification (Stotland and associates, 1961), when people conceive of themselves as having some characteristics in common with a model, they will introject other attributes of the model into their self-concept in order to maintain cognitive or perceptual consistency. According to Byrne (1968), on the other hand, already existent similarity between two individuals fosters identification primarily by accentuating attraction.

Review of Previous Research

Research on the relationship between sponsorship[3] and advancement or productivity in the academic profession has been meager. Only two published studies were found, one suggesting a link between eminent doctoral sponsorship and likelihood of attaining and retaining a university tenure-track job (Reskin, 1979) and the other indicating a relationship between eminent doctoral sponsorship and high productivity, measured in terms of "major" publications (Crane, 1965).

Similarly, systematic research on the role of the mentor in career development has been very limited and largely confined to the business world. No systematic study was found of the role played by mentors in the career development of academic professionals.

In a study of twenty-five top female executives, Hennig (1970) found that these women's success came critically from intense mentorship relationships with their bosses, who facilitated the women's advancement as they (the bosses) progressed to top positions in organizations. In a study of 331 female executives in business and industry (with forty-seven percent of the group having vice-presidential or higher rank in major corporations), Phillips (1977) found that career mentoring was common; sixty-one percent of these women reported having had mentors. According to these women, the mentor was

by no means the only factor in success, but mentorship was considered to be an important ingredient in overall career development. Sheehy (1974) reported that, almost without exception, the women she has studied who gained recognition in their careers were at some point nurtured by mentors. Vaillant (1977, p.219), reporting on one of his studies which traced the lives of 268 male respondents for over thirty years, remarked that "men with relatively unsuccessful careers either had not discovered mentors until their early forties, or had mentors who served only during adolescence." Roche (1979) surveyed 1,250 male and female senior executives of the nation's largest business enterprises and found that those who had mentors earned more money at a younger age and were more highly educated, were more likely to follow a career plan, derived greater pleasure from their work, and were happier with their career progress than those who had no mentors.

Methodology

A set of assumptions guided the selection of the following criteria in order to determine the level of career development of university faculty members and academic administrators: publication record, grant record, leadership record, highest academic rank attained, yearly gross income from professional activities, degree of job satisfaction, degree of career development satisfaction, and, in the case of academic administrators only, highest administrative position attained.[4]

Since no available standardized instruments were found to be capable of appropriately measuring the career development of individuals in the academic profession or of exploring aspects of their mentoring experiences, it became necessary to construct a self-report questionnaire. The proposed questionnaire was reviewed by two panels of judges and, as a result, the instrument underwent two revisions. In April, 1980, the questionnaire was pilot tested; thus, its

face/content validity and test/retest reliability were established. The pilot test also led to one more revision of the instrument.

The study was conducted during the months of May and June, 1980. The population consisted of all faculty members and administrators with academic rank employed by the State University System (S.U.S.) of Florida as of September, 1979. From this pool of 6,209 individuals, 438 potential study participants were randomly selected. The questionnaire was mailed to this sample group. After two follow-ups, a total of 292 schedules had been received, representing a response rate of 67%. Of these 292 completed questionnaires received, 287 were deemed usable. (Demographic characteristics of study participants are presented in the appendix, p.29.)

Two hypotheses were formulated in order to test the central question of the study, that is, whether mentors can significantly influence the level of career development of university faculty members and academic administrators.

The first hypothesis tested at the .05 level of significance was:

Academics with mentors will show a significantly higher level of career development than academics without mentors in terms of the following criteria: publication status, grant status, leadership status, academic rank, yearly gross income from professional activities, job satisfaction, and career satisfaction.

All seven criteria included in Hypothesis One were dichotomies. Three of these were natural dichotomies, namely: publication status (publishers/non-publishers); grant status (grant recipients/ grant non-recipients); and leadership status (leaders/non-leaders). The remaining four criteria were artificial dichotomies, namely: academic rank (full professors/ all other ranks); yearly gross income ($40,000 and above/ less than $40,000); job satisfaction (definitely satisfied/less satisfied); and career satisfaction (definitely satisfied/less satisfied).

Since the objective was to assess the effect of the "explanatory" variables (the seven dichotomous career development criteria) on a non-metric "response" variable (academics with mentors versus academics without mentors--another dichotomy), it was decided that, among the qualitative (non-metric) multivariate analysis techniques for which computer programs are currently available, logit analysis would be the most appropriate method to use in testing the above-mentioned hypothesis.

According to Fienberg (1977, p.81), "logit models are the categorical response analogs to regression models for continuous response variates." Actually, logit analysis is very similar to log-linear analysis (O'Muircheartaigh and Payne, 1977, p.136); in fact, Bishop et al. (1975, p.30), among others, classified the logit model as a special case of the more general log-linear model. In particular, logit analysis was chosen because it allows asymmetric log-linear analysis, that is, it can distinguish between "response" and "explanatory" variables (Fienberg, 1977; Goodman, 1978; Haberman, 1978). The choice of the specific logit analysis computer program used (Jones, 1980) was based on purely pragmatic considerations; the better-known, commercially available BMDP/3F program* (Dixon and Brown, 1979) was not nearly as efficient (i.e., capable of handling as many variables) as this privately-distributed logit analysis program.

The second hypothesis tested at the .05 level of significance was:

Academics with mentors will show a significantly higher level of career development than academics without mentors in terms of the following additional criteria: number of books published, number of edited readings published, number of competitive grants of $500,000 or more, number of competitive grants of between $200,000 and $499,999, and number of years of national or international leadership.

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*"Multi-way Frequency Tables -- Log-Linear Model"

This hypothesis included five continuous ratio or interval career development scales, namely: number of books published, number of edited readings published, number of competitive grants of $500,000 or more, number of competitive grants of between $200,00 and $499,999, and number of years of national or international leadership--all variables ranging in value from zero to whatever the largest number attained by all respondents was.

Since the main purpose was to compare the two groups of respondents, that is, those with mentors versus those without mentors (a non-metric, dichotomous, independent or "treatment" variable) on the five metric criteria or dependent variables, it was decided that the most suitable technique to use in testing the second hypothesis was multivariate analysis of variance.

The second objective of the study was to explore certain aspects of the mentoring experiences of academic professionals. Because of the more tentative and exploratory nature of this part of the investigation, the data collected pertaining to this objective were not submitted to statistical analysis; rather, the findings were described only.

Analyses were achieved through the use of the following computer programs: SPSS (Nie et al., 1975), MANOVA (Clyde, 1969), and a logit analysis program (Jones, 1980).

Findings

The main findings of the study in relation to the role of mentors in the career development of academic professionals were:

1. Academics with mentors showed higher performance than academics without mentors on the seven dichotomous career development scales designed to test Hypothesis One. Specifically, a higher percentage of academics with mentors than of academics without mentors had published, received grants, assumed leadership roles, attained full professorships, realized high incomes

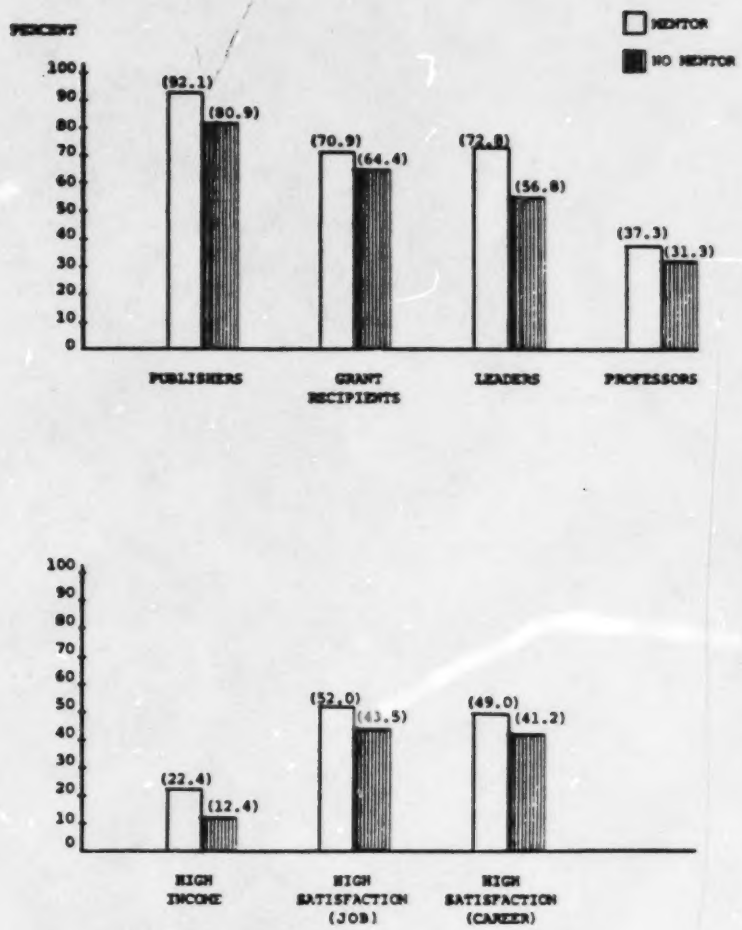

Figure 1: Variables tested by Hypothesis One

from professional activities, and derived high levels of job and career satisfaction (see Figure 1). Logit analysis performed in order to test the significance of the differences between academics with mentors and academics without mentors in all seven career development scales (considered together) yielded an overall chi-square of 14.16, which with seven degrees of freedom was significant at the .05 level. In view of the significant results, the statistical (null) version of Hypothesis One was rejected.

2. Academics with mentors showed higher levels of productivity than academics without mentors in all five metric career development scales designed to test Hypothesis Two. Specifically, their average number of book and

edited reading publications, competitive grants of $500,000 or more, competitive grants of between $200,000 and $499,999, and years of national or international leadership were all higher than the averages in all these measures for academics without mentors (see Figure 2). Multivariate analysis of variance performed in order to test the significance of the observed differences between academics with mentors and academics without mentors in all five scales (considered together) yielded a RAO's F (5,262) of 2.636, $p < .024$. In view of the significant results, the statistical (null) version of Hypothesis Two was rejected.

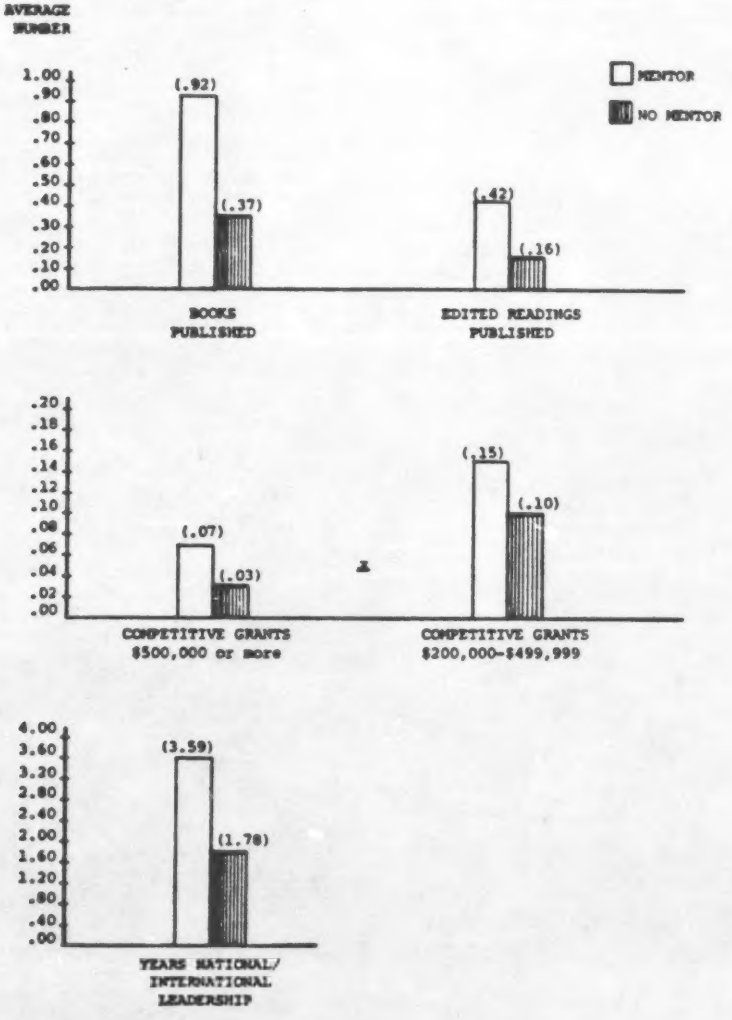

Figure 2: Variables tested by Hypothesis Two

Table 1

Additional Measures of Career Development

ADDITIONAL CRITERIA	MEANS	
	MENTOR	NO MENTOR
Articles in professional journals	16.57	13.15
Chapters in books published	1.28	.75
Total number of publications	19.21	14.43
Competitive grants $100,000 - $199,999	.24	.23
Competitive grants $50,000 - $99,999	.48	.35
Competitive grants $20,000 - $49,999	1.00	.56
Competitive grants under $20,000	1.13	.82
Non-competitive grants	.56	.45
Total number of grants	3.63	2.58
Total number of years of leadership at local, state/regional, and national/international levels	6.42	3.69

ADDITIONAL CRITERION	PERCENT	
	MENTOR	NO MENTOR
Administrative position (high-level administrators)	16.9	6.9

3. Academics with mentors achieved higher levels of performance than academics without mentors in each of the eleven remaining measures of career development (see Table 1).

The principal findings pertaining to various dimensions of a theory of mentorship relevant to career development in the academic profession were:

1. There was a high degree of similarity (in terms of personal attributes such as gender, race, ethnicity, academic field, social class background, perspective, and personality traits) between mentors and proteges (see Table 2 in the appendix, p.30). The evidence was strong, therefore, that "similarity" (as basis for compatibility and identification) is an important dimension of the mentoring experiences of academic professionals.

2. "Origin" of the relationship may be an important dimension of the mentoring experience, with preliminary findings indicating that official

assignment may produce better results than mentor selection of the protege or protege selection of the mentor (see Table 3 in the appendix, p.30). However, a subtle selection process may have influenced the results, at least partly.

3. "Duration" may represent an important dimension of the mentoring experience. Proteges experiencing long mentorships did better in terms of career development criteria than those whose mentorships were briefer (see Table 4 in the appendix, p.31). It must be noted, however, that the years of experience in academe of the two groups were not equal; thus, these preliminary results must be taken cautiously.

4. "Number of mentors" may be an important factor in a theory of mentorship relevant to career development in the academic profession. Academics with more than one mentor did better than academics who had experienced only one mentor (see Table 5 in the appendix, p.31). But these preliminary results must be taken with caution since the years of experience in academe of the comparison groups were not equal.

5. "Career stage" (of the protege) during which the mentorship begins may turn out to be an important variable in a theory of mentorship. Academics whose mentorships began early out-performed academics whose mentorships came later, but by a narrow margin (see Table 6 in the appendix, p.32). The ambiguous results may have been due, at least partly, to the overly broad nature of the career stage categories used.

6. There was a strong indication that high quality (in terms of assistance, personal relationship, and timing) may be a defining characteristic of mentorships. The vast majority of proteges in the study considered their mentorships to be highly effective experiences in terms of these dimensions (see Table 7 in the appendix, p.33).

7. Experience as protege may be highly important in order for an individual to become a mentor. Very few of the academics in the study who had not had mentors became mentors (see Table 8 in the appendix, p.32).

Limitations of the Study

The findings may have been affected by at least four limitations which should be noted:

1. The response rate (67%), although very respectable for mail questionnaires, fell below the coveted but seldom realized 80% level which would have lent greater certainty to the result. Decidedly, the time (May-June) was not the best for a mail survey among academics, as the last few weeks of the academic year tend to be more hectic. Further, the long and relatively complex nature of the questionnaire may have discouraged some potential participants. Finally, a few potential participants may have been turned off by the "informed consent" form required by the sponsoring university; particularly, a required statement holding the university harmless for participation in the project was objectionable to some individuals. In short, 33% of the potential study participants did not respond to the mail questionnaire despite one reminder and two follow-ups. It is not known to what extent the results may have been affected by the level of non-response.

2. A totally unrestricted random sampling of academics with rank produced a group of 292 respondents representing seventy-five different academic fields. As it is generally recognized that each discipline has its own particular character and reward structure (Dunham et al., 1966, p.37; Hall, 1975), and since this study did show some variability in the incidence of mentorship from academic field to academic field, the lumping together of so many individuals from so many diverse fields may have affected the results to an unknown extent. Similarly, such unrestricted random sampling of academics

produced a mixed group in terms of sex. As it is generally recognized that the level of career development of female academics is much lower than that of male academics (e.g., Astin, 1969; Bayer, 1973; Bernard, 1964; Lewis, 1975, pp. 125-146; Wilson, 1979) and that was confirmed by this study, treating the two sexes together (particularly since their levels of mentorships were not equivalent) may have affected the results to some extent. Exactly the same limitation that has been noted in relation to sex applies to racial/ethnic background since the racially/ethnically different study participants (specifically blacks, Hispanics, and Asians) also showed lower than average levels of career development in the measured areas as well as a different incidence of mentorship.

3. The study population--namely, academics from Florida's public universities cannot be assumed to be representative of university academics in the U.S. Therefore, caution must be exercised in generalizing the findings beyond the S.U.S. of Florida.

4. This study may be of little relevance to academics in four-year colleges and community colleges, as the character and reward structure of universities may be different from that of other educational institutions.

Conclusions

In the light of the findings and in view of the limitations noted above, several major conclusions may be drawn cautiously:

1. Mentors appear to contribute significantly to the advancement of the academic careers of faculty members and academic administrators. In this study, invariably (as measured by a total of twenty-three different career development scales), academics with mentors showed higher levels of performance, prestige, and satisfaction than academics without mentors. Specifically, the results indicated that the average number of book publications, of major competitive grants, and of years of national or international leadership of

academics with mentors were significantly higher than the same averages for academics without mentors. Similarly, respondents reaching the top academic ranks, the top income levels, the top levels of satisfaction from job and career, and the high-level administrative positions had experienced mentorships (as proteges) more frequently than respondents whose attainments in these areas were lower.

2. Faculty members and academic administrators without mentors seem to be at a disadvantage, particularly those whose aim is to achieve top levels of performance, prestige, and satisfaction. While the study respondents showed that it is possible to reach high levels of career development in the academic profession without mentors, the fact that considerably fewer of the academics without mentors "made it" seems to indicate that the road to the top may be much more tortuous for those who travel it without a guide.

3. Certain factors such as degree of similarity between mentors and proteges, origin of the mentorship, duration of the mentorship, number of mentors, career stage (of the protege) during which the mentorship begins, quality of the mentorship, and experience as protege may represent important dimensions of a theory of mentorship relevant to career development in the academic profession. Specifically, the findings (although at times possibly confounded by the lack of control of certain variables) indicated that while the career development of academic professionals seems to be significantly enhanced by mentorship (regardless of specific mentoring conditions experienced), exposure to various specific conditions or sets of conditions (such as early experience with mentors, long mentorships, and multiple mentorships) is associated with even higher career development levels. High degree of similarity between mentors and proteges appears to be an important basis for the development of mentor-protege relationships, probably because it fosters compatibility and

identification. High quality (in terms of assistance offered, personal relationship, and timing) emerged as, possibly, a defining characteristic of mentorship; apparently professional helping relationships are not perceived as mentorships unless they are of high caliber. Finally, there was indication that experience as protege may be an important pre-requisite for academic professionals to become mentors. (It must be understood that all evidence in these areas, because of the exploratory nature of this part of the investigation, must be taken as preliminary and tentative.)

4. Minority-group members (specifically blacks, Hispanics, and Asians) appear to be particularly at risk in the search for mentors in the academic profession. On the basis of the study findings, one may suspect that they not only encounter considerable difficulty in the search for a mentor because of substantial lack of similarity to available mentors in academe but also, having fewer experiences as proteges, they are less likely to become mentors. Thus, many such minority-group members may be involved in a vicious circle that makes it difficult for them to help themselves or members of their own group. Those without memtorship will probably find it harder to obtain appointments at universities, or, if they manage to penetrate academe on their own, it may be harder for them to "make it" beyond the revolving door.

Theoretical Significance

The findings reported herein have important implications for career development theory and research. Nearly all career development theoreticians have ignored the potential role that mentors might play in career development. The work of Dalton, Thompson, and Price (1977), however, represented an important departure from standard comceptualizations of career development. For the first time, possibly, attention was focused on mentors in career development theory as these researchers found mentoring to be a stage in the careers of professionals.

Although career development in general and that of academic professionals

in particular is influenced by many different factors, as research evidence bears on the significant impact of mentors on the careers of professionals, career development theory must begin to recognize mentorship as not only a stage in professional development but also a significant factor in and of itself in the determination of the career development of professionals.

Equally, as evidence accumulates on the significant impact of mentors on the careers of professionals, the need for understanding the process of mentorship as related to professional career development becomes more pressing. In order to construct a theory of mentorship relevant to the career development of academic professionals, one must first go through the tedious yet necessary task of breaking down such a "global" process as academic mentoring into its crucial dimensions. The main objective of the remainder of this section is to address this first, and perhaps most crucial, of the theory-building tasks. Once the important components--the facets of mentorship, so to speak--are identified, the process of hypothesizing and testing relationships among variables can begin.

One of the important insights gained in the process of beginning construction of a theory of mentorship was that, although academic professionals with mentors show (as a group) significantly higher levels of career development than those without mentors, each protege is exposed to a unique mentoring condition or a set of unique mentoring conditions which may have significantly different consequences on his or her level or pattern of career development.

The very large number of possible mentoring conditions capable of having differential impact on the levels and patterns of career development of proteges becomes evident as some of the important mentoring variables capable of affecting the career development of academic professionals (individually or in various combinations) are identified. The author suggests the following

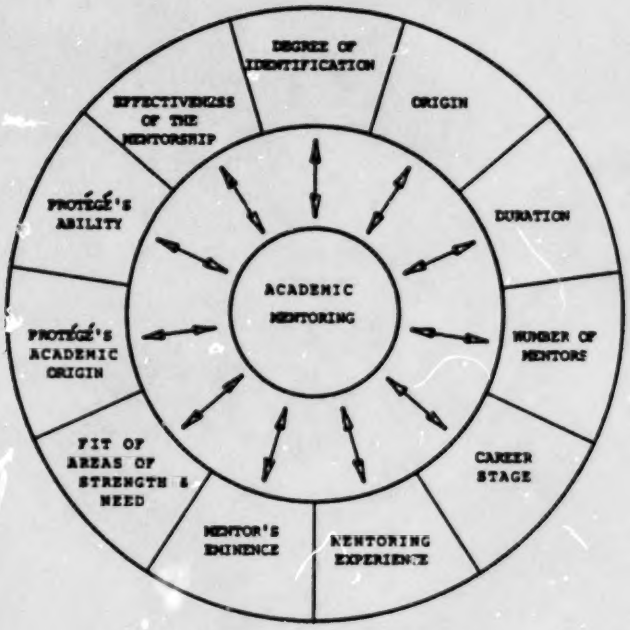

Figure 3. Some Dimensions of a Theory of Mentorship Relevant to Career Development in the Academic Profession

preliminary list of "explanatory" variables (shown in Figure 3), some of which were explored in this study:

1. Origin of the mentorship (e.g., official assignment/protege taking the initiative to seek out the mentor/ mentor selecting the protege).

2. Length of the mentorship.

3. Number of mentors experienced by the protege.

4. Career stage of both the protege and the mentor during which the mentorship took place (e.g., undergraduate years/graduate school/time of entry to the university organization as faculty member or academic administrator and pre-tenure stage within the organization/post-tenure stage within the university organization).

5. Level of mentoring experience of the mentor and of the protege (e.g., former protege and former mentor/former protege only/no previous experience with mentorships).

6. Eminence of the mentor (e.g., eminent/not eminent).

7. Relative fit of mentor's area(s) of strength and protege's professional development need(s) (e.g., teaching/ research and publication/grant activities/leadership activities/administration).

8. Degree of identification between mentor and protege (e.g., measured in terms of similarity or difference along dimensions such as gender, race ethnicity, social class background, academic field, viewpoint, and personality characteristics).

9. Quality or effectiveness of the mentorship (e.g., measured in terms of at least three basic dimensions: usefulness of the assistance received, quality of the personal relationship, and appropriateness of the timing of the experience in terms of readiness of the protege to be a protege and of the mentor to be a mentor).

10. Ability of the protege to perform academic tasks (e.g., promising/not promising).

11. Academic origin of the protege (e.g., distinguished [educated at a "major" university] /not distinguished [not educated at a major university]).

Ultimately, it will be the study of the impact on career development of these and other specific mentorship variables and, particularly, of their effects in various combinations and not the study of the effects of mentorship as a "global" factor that will lead to the development of a grounded theory[5] of mentorship relevant to the career development of academic professionals.

Practical Significance

Given the evidence provided in this report as to the significant contribution that mentors appear to make to the careers of faculty members and

academic administrators, several courses of action would be appropriate:

1. Finding a good mentor should become an important item in the agenda of any individual entering graduate school or joining a university organization as faculty member or academic administrator.

2. Providing individuals with opportunities to find good mentors should become an important responsibility of university organizations. In this respect, it would be quite important to: (a) promote actively the growth of university academics to the stage where they can act as mentors to students or junior colleagues; (b) encourage experienced, competent, senior academics (including particularly women and members of racial or ethnic minority groups) to become mentors; (c) make mentorship part of the academic reward system in the sense of giving some form of recognition or benefit to mentors.

3. Females and members of racial or ethnic minority groups who generally have a hard time "making it" in academe, particularly at universities, should be made aware of the potential benefits of mentorship.

A Note on a Rival Hypothesis

A rival hypothesis may be proposed about the observed relationship between mentorship and career development. Specifically, one may argue that it is not mentorship alone that accounts for the higher levels of career development exhibited by academics with mentors but also some more subtle selection process; for example, "promising" individuals (e.g., in terms of ability to perform academic tasks or in terms of distinguished academic origins) may be more successful in attaining a desired mentor or may be more frequently chosen to be "mentored." If later these promising individuals go on to achieve higher levels of career development, their success may be as much a reflection of their higher ability or better prior education as of the mentor's actual impact on their careers.

Even the finding that official assignment of mentors and proteges produced better results in terms of career development of the protege than situations in which the protege sought out the mentor or the mentor selected the protege does not necessarily weaken this argument. Indeed, one may conjecture that a high degree of selectivity has probably operated in cases of officially assigned mentorships that persist. Undoubtedly, mentoring is part of a larger structure of institutional selectivity that, invariably, leaves some people out.

Recommendations for Further Research

1. A similar study of the relationship between career development and mentorship should be conducted, using a different academic population--perhaps several major universities or a public university system of a different character. Such study should be restricted to fewer academic disciplines of a similar character, reward structure, and mentoring incidence. Since the definition given to the mentor concept would be of central importance, one might want to re-examine the concept as presented in this report. Finally, an effort should be made to obtain measures of the proteges' degree of "promise" (see the section, "A Note on a Rival Hypothesis") so as to begin to separate the role of this factor from the role of the mentor in the career development of proteges.

2. Studies of the differential impact on career development of specific mentoring variables (such as those included in Figure 3), and particularly of their interaction effects, are needed in order to gather the necessary evidence to construct a grounded theory of mentorship relevant to the career development of academic professionals.

3. This study yielded data (not analyzed or reported herein) on the mentorship as a process from the protege's perspective, in terms of such basic dimensions as assistance offered, personal relationship, and timing.

It would be interesting to gather similar data on the mentoring process in terms of the same dimensions but from the mentor's perspective. Such a study of the psycho-social aspects of mentorship from an integrated perspective (one balancing the views of both mentors and proteges) should be useful to those involved in or contemplating involvement in a mentorship.

4. An important aspect of the career development of academic professionals--namely, teaching performance--was excluded from the criteria of career development considered in the current study. A question which merits future examination is whether mentors can significantly influence the teaching effectiveness of faculty members.

5. Another question for further research is whether mentorships involving substantially dissimilar mentors and proteges can be effective in terms of career development of the protege. This is an issue of potential significance, particularly for minority-group academics.

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Footnotes

[1]This report summarizes certain aspects of a copyrighted Ph.D. dissertation bearing the same title which was completed by the author at the University of Miami in 1981. This dissertation is available from University Microfilms International, 300 N. Zeeb Rd., Ann Arbor, Mich. 48106. Correspondence should be sent to Magaly Queralt, Ph.D., Associate Professor of Social Work, Florida International University, Bay Vista Campus, North Miami, Florida 33181.

[2]For the purposes of this research project, mentors were defined as "persons from outside their proteges' families, usually older, wiser, more experienced, more influential, and at least initially, more creatively productive than their proteges, who, beyond what would be expected of them in their situation, in a professional but caring and somewhat paternal or maternal manner, take their proteges under their wings, so to speak. Mentors assist their proteges in many ways. For example: Mentors may share their knowledge, skills, understanding, experience, and wisdom, encouraging their proteges to be all that they can be. They may assist their proteges by reviewing and criticizing their work and by acquainting them with various aspects of an organization or a profession. They may sponsor their proteges in the occupational world, thereby facilitating their advancement. They may inspire and serve as role models. They may serve as advisors, counselors, and moral supporters. By 'bestowing their blessings,' so to speak, they may support and facilitate the realization of their proteges' personal and occupational dreams."

[3]Sponsorship and mentorship are not synonymous processes. Sponsorship is the process by which a more influential person opens up opportunities for another less influential individual by using influence to promote the other person within an organization or in a discipline in order to facilitate the

other individual's advancement. Of course, many mentors sponsor their proteges and many sponsors also act as mentors.

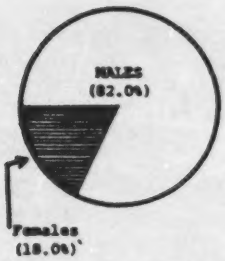
[4]Readers interested in detailed information about the selected measures of career development as well as about the rationale that guided their selection are referred to Chapter 3 of the dissertation, sections entitled, "Rationale for Selection of the Career Development Measures" and "Criteria Selected."

[5]The grounded theory approach which has been advocated by Glaser and Strauss (1967) emphasizes theory building. In effect, according to this approach, theories are generated (discovered) from research data.

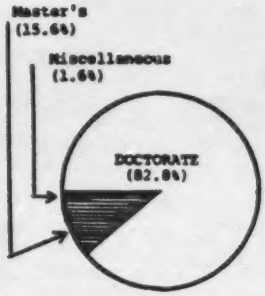
Appendix

Demographic Characteristics of Study Participants

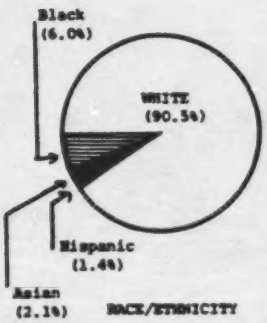
MENTORING CONDITION



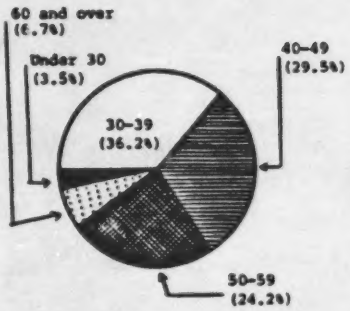
SEX



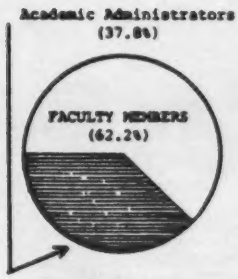
HIGHEST EARNED DEGREE



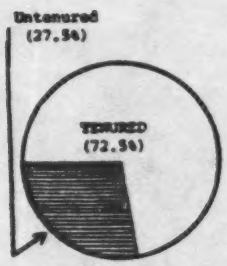
RACE/ETHNICITY



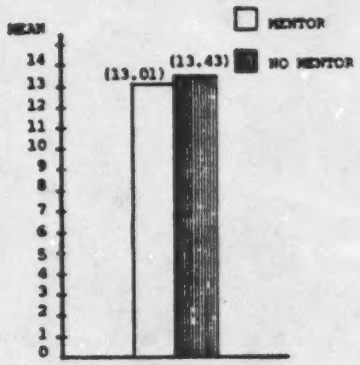
AGE



TYPE OF ACADEMIC APPOINTMENT



TENURE STATUS



F.T.E. YEARS OF EXPERIENCE IN ACADEMIC

Table 2

Degree of Similarity Between Respondents With Mentors and Their Mentors on the Basis of Gender, Race, Ethnic Background, Academic Field, Social Class Background, Perspective or Viewpoint, and Personality Characteristics

Personal Attributes	Most Important Mentor				Second Most Important Mentor			
	Similar		Different		Similar		Different	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	(n=146-52)				(n=100-106)			
Gender	123	82.0	27	18.0	89	84.8	16	15.2
Race	145	95.4	7	4.6	101	95.3	5	4.7
Ethnic Background	118	78.1	33	21.9	77	75.5	25	24.5
Academic Field	136	90.1	15	9.9	92	90.2	10	9.8
Social Class Background	97	66.4	49	33.6	66	66.0	34	34.0
Perspective or Viewpoint	121	80.7	29	19.3	78	75.0	26	25.0
Personality Traits	127	86.4	20	13.6	78	78.0	22	22.0

Table 3

Selected Measures of Career Development of Respondents With Mentors According to the Origin of the Relationship with Their Most Important Mentor

Measures of Career Development	Origin of the Relationship					
	Protege Took Initiative (n=57)		Mentor Took Initiative (n=40)		Officially Assigned (n=40)	
	$\bar{X}$	%	$\bar{X}$	%	$\bar{X}$	%
Publishers (vs non-publishers)		96.5		89.7		90.0
Grant recipients (vs non-recip.)		75.4		59.0		79.5
Leaders (vs non-leaders)		61.8		85.0		85.0
Number of books published	1.07		.56		1.20	
Number of years of national or international leadership	3.66		2.32		6.00	

Table 4

Selected Measures of Career Development of Respondents With Mentors According to The Duration of the Relation with Their Most Important Mentor

Measures of Career Development	Duration of the Relationship			
	5 Years or Less (n=76)		More than 5 Years (n=75)	
	$\bar{X}$	%	$\bar{X}$	%
Publishers (vs non-publishers)		90.8		93.2
Grant recipients (vs non-recip.)		66.7		74.3
Leaders (vs non-leaders)		68.0		77.0
Number of books published	.82		1.05	
Number of years of national or international leadership	2.66		4.51	

Table 5

Selected Measures of Career Development of Respondents With Mentors According to Number of Mentors Reported

Measures of Career Development	Number of Mentors					
	One Mentor (n=51)		Two Mentors (n=64)		Three or More Mentors (n=38)	
	$\bar{X}$	%	$\bar{X}$	%	$\bar{X}$	%
Publishers (vs non-publishers)		84.3		95.3		97.3
Grant recipients (vs non-recip.)		56.9		74.6		83.8
Leaders (vs non-leaders)		64.7		71.4		86.5
Number of books published	.51		1.02		1.32	
Number of years of national or international leadership	2.02		3.18		6.57	

Table 6

Selected Measures of Career Development of Respondents With Mentors According to Career Stage During Which Mentorship Under Most Important Mentor Began

Measures of Career Development	Career Stage			
	Before Job as College/ University Faculty/ Administrator (n=115)		During First Fifteen Years as College/ Univ. Faculty/ Admin. (n=33)	
	$\bar{X}$	%	$\bar{X}$	%
Publishers (vs non-publishers)		92.2		90.6
Grant recipients (vs non-recip.)		73.7		59.4
Leaders (vs non-leaders)		72.8		78.1
Number of books published	.94		.97	
Number of years of national or international leadership	3.94		2.94	

Table 8

Mentoring Offered by Respondents With Mentors and Without Mentors

Type of Respondent	With Mentor Number	With Mentor Percent	Without Mentor Number	Without Mentor Percent	Total Number	Total Percent
Mentor	114	74.5	25[a]	19.1	139	48.9
Non-mentor	39	25.5	106	80.9	145	51.1
TOTAL	153	53.7	131	46.3	284	100.0

[a]Included in this number are four of a total of six respondents without mentors whose parents were college or university professors or administrators.

Table 7

Ratings by Respondents With Mentors of the Assistance Received from Their Mentors, the Quality of the Personal Relationship with Their Mentors, and the Timing of the Mentoring Experience

Rating	Most Important Mentor Number	Most Important Mentor Percent	2nd Most Important Mentor Number	2nd Most Important Mentor Percent
ASSISTANCE				
Definitely Useful:				
Extremely useful	93	61.6	47	45.7
Very useful	53	35.1	43	41.7
sub-total	146	96.7	90	87.4
Less Useful:				
Fairly useful	5	3.3	13	12.6
Neutral, undecided	-	-	-	-
Not very useful	-	-	-	-
Not at all useful	-	-	-	-
sub-total	5	3.3	13	12.6
TOTAL	151	100.0	103	100.0
PERSONAL RELATIONSHIP				
Definitely Satisfying:				
Extremely satisfying	58	38.9	30	29.7
Very satisfying	63	42.3	46	45.5
sub-total	121	81.2	76	75.2
Less Satisfying:				
Fairly satisfying	26	17.4	20	19.8
Neutral, undecided	1	.7	4	4.0
Somewhat dissatisfying	-	-	1	1.0
Very dissatisfying	1	.7	-	-
sub-total	28	18.8	25	24.8
TOTAL	149	100.0	101	100.0
TIMING				
Definitely Appropriate:				
Extremely appropriate	71	48.6	47	47.4
Very appropriate	55	37.7	36	36.4
sub-total	126	86.3	83	83.8
Less Appropriate:				
Fairly appropriate	15	10.3	12	12.1
Neutral, undecided	3	2.1	3	3.0
Somewhat inappropriate	2	1.4	1	1.0
Very inappropriate	-	-	-	-
sub-total	20	13.7	16	16.2
TOTAL	146	100.0	99	100.0